BEFORE THE BOARD OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF THE ANSCHUTZ CORPORATION FOR AN EXCEPTION TO THE DRILLING LOCATION ESTABLISHED BY BOARD ORDER IN CAUSE NO. 189-1 AND AFFECTING OIL AND GAS DRILLING UNIT 2 CONSISTING OF SECTION 33 AND PART OF SECTION 32, TOWNSHIP 6 NORTH, RANGE 8 EAST, SLB&M, SUMMIT COUNTY, UTAH

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER OF APPROVAL

> Docket No. 96-008 Cause No. 189-1B

This cause came on for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, August 28, 1996, at the hour of 10:30 a.m. The following Board members were present and participated at the hearing:

Dave D. Lauriski, Chairman Thomas B. Faddies Jay L. Christensen Kent G. Stringham Judy F. Lever Elise Erler Raymond Murray

Attending and participating on behalf of the Division of Oil, Gas and Mining (the "Division") were James W. Carter, Director; Lowell P. Braxton, Deputy Director; Ronald J. Firth, Associate Director, Oil and Gas; Brad G. Hill, Petroleum Geologist; and Gilbert L. Hunt, Environmental Manager. The Board and the Division were represented by Patrick J. O'Hara, Esq. and Thomas A. Mitchell, Esq., respectively, Assistant Attorneys General.

Testifying on behalf of Petitioner The Anschutz Corporation ("Anschutz") were

Paul R. Lamerson, Consulting Geologist, and Hal Koerner, Jr., Petroleum Engineer and

Anschutz's General Manager for Drilling and Production. A. John Davis, Pruitt, Gushee

& Bachtell, appeared as attorney on behalf of Anschutz.

The Board received into the record, together with other exhibits, letters from the

owners in the adjacent drilling & spacing units and from the Wyoming Oil and Gas

Conservation Commission stating they did not object to and/or would not protest Anschutz's

Request for Agency Action (the "Request"). No objections or protests were made in

opposition to the Request and no other parties appeared or participated at the hearing.

The Board, having considered the testimony presented and the exhibits received at the

hearing, being fully advised, and for good cause appearing, hereby makes the following

findings of fact, conclusions of law, and order.

FINDINGS OF FACT

1. On July 10, 1996, Anschutz submitted its Request for Agency Action in this

matter, in accordance with Utah statute and the applicable rules and regulations of the Board

and Division, for an exception to the drilling location established by Board Order in Cause

189-1 dated November 19, 1980 ("the 1980 Order"), and affecting oil and gas Drilling &

Spacing Unit No. 2 consisting of the following real property located in Summit County,

Utah:

Township 6 North, Range 8 East, SLB&M

Section 33: Lots 1 through 4; W¹/₂W¹/₂

Section 32: E½, E½E½W½,

consisting of 646.91 acres

2

- 2. In the 1980 Order, the Board established Drilling Unit No. 2, together with two other gas drilling and spacing units of approximately 646 acres for future wells drilled into the Phosphoria Formation, Yellow Creek Deep Field.
- 3. The permitted location for each well in the drilling and spacing units was required to be no closer than "1,000 feet from the boundary of what could be considered the NW¼ and no closer than 1,000 feet from the boundary of what could be considered the SE¼ of the drilling unit."
- 4. Anschutz requested the exception in order to drill the AL&L 14-33 gas well for the production of sour gas and condensate in Drilling Unit No. 2 from the Phosphoria Formation at a surface location in what could be considered the SE¼ of Drilling Unit No. 2. The surface location requested was 532 feet from the south line (FSL) and 786 feet from the east line (FEL). The bottom hole location requested was 100 FSL and 460 FEL as shown on the plat which was received into evidence as Exhibit "A".
- 5. Anschutz and the Division, through Mr. Davis and Mr. Mitchell, entered a stipulation on the record stipulating and representing that (a) all owners of record in the unit, together with the State of Wyoming had no objection to and/or do not protest the Request; (b) the Division had reviewed the Request and the Affidavits and exhibits in support thereof, supported and would administratively approve Anschutz's Request; and (c) based upon the expert opinions of Mssrs. Lamerson and Koerner, geologic, structure and reservoir conditions present in the Phosphoria Formation justified the drilling of the subject well at the

requested location and would maximize the economic recovery of natural gas, production, prevent waste and loss of gas, and protect correlative rights.

- 6. Based upon the statements of Mr. Carter and Mr. Mitchell, the testimony of Anschutz's expert witnesses, and the exhibits in support thereof, the Board finds as follows:
 - (a) The legal well location established in the 1980 Order was based upon limited geologic, structural, and reservoir information available at that time pertaining to the Yellow Creek Field and Phosphoria Formation;
 - (b) The requested exception location is based upon a wealth of geologic, structural, and reservoir data obtained from a large number of wells drilled in the field since the 1980 Order, including two deep wells into the Phosphoria Formation;
 - (c) From analysis of that data, it is generally agreed that the Yellow Creek anticline is asymmetrical and plunges deeply to the southwest at the Nugget Sandstone Structural position. At the Phosphoria Formation level, the anticline has a steep to overturned southeast flank and a gentle northwest flank. To obtain maximum drainage of reserves from the Phosphoria Formation, the bottom hole must be located as high as structurally possible on the northwest flank and the southwest plunge of the anticline. By locating the bottom hole of the proposed well at the location requested, Anschutz expects to intercept the Phosphoria Formation close to the crest of the structure. By doing so, in addition to maximizing the available amount of reserves, Anschutz also expects

to take advantage of natural fracturing and minimize water production. In contrast, a well drilled at the legal location would bottom hole much lower in the Phosphoria Structure in Drilling Unit No. 2 close to the gas/water contact and well away from the area of maximum fracture density; and

- (d) The proposed exception location is in the public interest, will promote conservation, is designed to increase the ultimate recovery of oil and gas and prevent waste, and will protect the correlative rights of each affected owner.
- 7. Pursuant to the requirements of statute and Utah Admin. Code Rules R649-3-3.5 and R649-106-300, Anschutz mailed, postage prepaid, a copy of the Request for Agency Action, and supporting affidavits, to the owners of all directly or diagonally offsetting drilling units.
 - 8. Notice was duly published as required by Utah Admin. Code R641-106-100.
- 9. The vote of the Board members present at the hearing and in this cause was unanimous in favor of approving the Request for Agency Action.

CONCLUSIONS OF LAW

- 10. Due and regular notice of the time, place and purpose of the hearing was properly given to all interested parties in the form and manner as required by law and the rules and regulations of the Board and Division.
- 11. The Board has jurisdiction over all matters covered by the Request for Agency Action pursuant to Utah Code Ann. § 40-6-5 and has the power and authority under Utah Code Ann. § 40-6-6(6) to render the order herein set forth.

12. The proposed exception location is reasonably necessary to fulfill the purposes of the Utah Oil and Gas Conservation Act (Utah Code Ann. §§ 40-6-1, et seq.).

ORDER

Based upon the Request for Agency Action, the stipulation, testimony and evidence submitted, and the findings of fact and conclusions of law stated above, the Board orders as follows:

- 1. The Board hereby grants Anschutz's Request for an exception well location for the purpose of drilling a Phosphoria Formation gas well in Drilling Unit No. 2 established by Order in Cause No. 189-1 dated November 19, 1980, at a surface location 532 feet from the south line and 786 feet from the east line and a bottom hole location 100 feet from the south line and 460 feet from the east line in what would be considered the SE¼ of said Drilling Unit No. 2.
- 2. The Board retains continuing jurisdiction over all matters covered by this Order and over all parties affected thereby.

DATED this 18 day of September, 1996.

STATE OF UTAH BOARD OF OIL, GAS AND MINING

Dave D. Lauriski, Chairman

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER OF APPROVAL for Docket No. 96-008, Cause No. 189-1B to be mailed by certified mail, postage prepaid, on this 1914 day of September, 1996, to the following:

A. John Davis
PRUITT, GUSHEE & BACHTELL
1850 Beneficial Life Tower
Salt Lake City, Utah 84111

The Anschutz Corporation 555 - 17th Street, Suite 2400 Denver, Colorado 80202

Sent by Hand Delivery To:

Patrick J. O'Hara, Esq. Assistant Attorney General 1594 West North Temple, Suite 300 Box 140855 Salt Lake City, UT 84114-0855

Thomas A. Mitchell Assistant Attorney General 1594 West North Temple, Suite 300 Box 140855 Salt Lake City, UT 84114-0855

First-Class Mail, Postage Prepaid To:

Wyoming Oil & Gas Conservation Comm Attn: Don Basko, Oil & Gas Supervisor P. O. Box 2640 Casper, Wyoming 82602

Union Pacific Resources 801 Cherry Street Ft. Worth, Texas 76102-6803

. . . .

AT&T COMMUNICATIONS, INC. c/o Prentice-Hall Corp.,
Registered Agent
201 South Main, Suite 1800
Salt Lake City, Utah 84111-2218

J. M. Brown, Jr. Attn: Jens Gran P. O. Box 210 Polson, Montana 59860

Hawks Industries, Inc. Attn: Bruce Hinchey P. O. Box 359 Casper, Wyoming 82602

Amoco Production Company 1670 Broadway Denver, Colorado 80201 APO Operating Partnership Attn: George H. Solich 2000 Post Oak Blvd., Suite 100 Houston, Texas 77056-4400

H.O.M.M.E. Attn: Orrin R. Homme P. O. Box 654 Rancho Mirage, California 92270

Douglas A. Denton P. O. Box 7947 Midland, Texas 79707

Diane Ruley

BEFORE THE BOARD OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

The undersigned, as Chairman of the Board of Oil, Gas & Mining, having received and reviewed Petitioner, The Anschutz Corporation's, *Ex Parte* Motion For Leave to File Affidavits in variance with Rule 641-105-100 of the Utah Administrative Code, and for good cause shown,

HEREBY GRANTS Anschutz leave to file the Affidavits of Paul R. Lamerson and Hal Koerner, Jr. in support of its Request for an Exception to the Drilling Location in this matter.

DATED this 5th day of August, 1996.

STATE OF UTAH BOARD OF OIL, GAS AND MINING

Dave D. Lauriski, Chairman

CERTIFICATE OF MAILING

I hereby certify that I caused a true and correct copy of the foregoing ORDER for Docket No. 96-008, Cause No. 189-1B to be mailed by certified mail, postage prepaid, on this $\frac{|4+h|}{2}$ day of August, 1996, to the following:

A. John Davis PRUITT, GUSHEE & BACHTELL 1850 Beneficial Life Tower Salt Lake City, Utah 84111

The Anschutz Corporation 555 - 17th Street, Suite 2400 Denver, Colorado 80202

First-Class Mail, Postage Prepaid To:

Wyoming Oil & Gas Conservation Comm Attn: Don Basko, Oil & Gas Supervisor P. O. Box 2640 Casper, Wyoming 82602

Union Pacific Resources 801 Cherry Street Ft. Worth, Texas 76102-6803

AT&T COMMUNICATIONS, INC. c/o Prentice-Hall Corp.,
Registered Agent
201 South Main, Suite 1800
Salt Lake City, Utah 84111-2218

J. M. Brown, Jr. Attn: Jens Gran P. O. Box 210 Polson, Montana 59860

Hawks Industries, Inc. Attn: Bruce Hinchey P. O. Box 359 Casper, Wyoming 82602 Amoco Production Company 1670 Broadway Denver, Colorado 80201

APO Operating Partnership Attn: George H. Solich 2000 Post Oak Blvd., Suite 100 Houston, Texas 77056-4400

H.O.M.M.E. Attn: Orrin R. Homme P. O. Box 654 Rancho Mirage, California 92270

Douglas A. Denton P. O. Box 7947 Midland, Texas 79707

Diane Rubey